

b.) Remarks

Claims 12-19, 28, and 29 are pending in this application. Claim 20 is cancelled. New Claim 29 has been added to alternatively define Applicant's invention.

Applicant affirms the election of the invention of Species I, claims 12-19 and 28.

Claims 12-19 and 28 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of copending Application No. 10/909,108. Applicant requests to defer this matter until the status of the 10/909,108 application is determined.

Claims 12, 18-19 and 28 were rejected under 35 U.S.C. 102(b) as being anticipated by Hendow *et al.* (U.S. Patent No. 5,418,641). This rejection is respectfully traversed for the following reasons.

Claim 12 and new claim 28 concern the feature in which the diameter and sag in combination with a length of the cavity degrade a stability of transverse modes. Hendow does not concern inducing transverse mode instability but instead seeks to have the modes correspond in frequency. Moreover, these claims dictate that the sag and diameter are used to create instability. Hendow does not appreciate the diameter dependency on transverse mode stability.

Thus there is no anticipation.

Claims 12 and 28 were rejected under 35 U.S.C. 102(b) as being anticipated by Baird *et al.* (U.S. Patent No. 5,317,477). In a related rejection, claims 13-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Baird *et al.* (U.S. Patent No. 5,317,477) or Hendow *et al.* (U.S. Patent No. 5,418,641). These rejections are respectfully traversed for the following reasons.

Similar to Hendow, Baird does not appreciate the diameter dependency on transverse mode stability. The noted portion of Baird is simply directed to the focus of the pump beam for low threshold operation.

Thus there is no anticipation nor is the claimed invention suggested.

Applicant believes that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

By /grant houston/
J. Grant Houston
Registration No.: 35,900
Tel.: 781 863 9991
Fax: 781 863 9931

Lexington, Massachusetts 02421
Date: April 13, 2006